

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Expanding Flexible Use of the 3.7 to 4.2 GHz Band)	GN Docket No. 18-122
)	
Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz)	GN Docket No. 17-183
)	
Petition for Rulemaking to Amend and Modernize Parts 25 and 101 of the Commission’s Rules to Authorize and Facilitate the Deployment of Licensed Point-to-Multipoint Fixed Wireless Broadband Service in the 3.7-4.2 GHz Band)	RM-11791
)	
Fixed Wireless Communications Coalition, Inc., Request for Modified Coordination Procedures in Band Shared Between the Fixed Service and the Fixed Satellite Service)	RM-11778
)	

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”)¹ submits these comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) Notice of Proposed Rulemaking (“NPRM”) seeking comment on potential opportunities for flexible use of spectrum between 3.7-4.2 GHz.² Carriers will require a varied portfolio of low-, mid-, and high-band

¹ CCA is the nation’s leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers to regional and national providers serving millions of customers. CCA also represents associate members including vendors and suppliers that provide products and services throughout the mobile communications ecosystem.

² *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Notice of Proposed Rulemaking (rel. July 13, 2018) (“NPRM”).

spectrum if the United States is to position itself as a leader in 5G deployment, and CCA applauds the FCC's efforts to make more spectrum available to realize these advanced mobile broadband services.³ Indeed, Commissioner Carr aptly recognizes that “there’s still work to be done in the mid-band, where other countries have freed up substantial amounts of spectrum.”⁴ Similarly, Commissioner Rosenworcel has noted the importance of “explor[ing] a variety of mechanisms for clearing the 3.7-4.2 GHz band... [] to reclaim lost leadership in spectrum that is critical for success in 5G networks.”⁵ The proceeding also represents one of the only remaining opportunities to free-up a significant swath of mid-band spectrum that is ready and available for next-generation deployments. And a panoply of stakeholders has emphasized that the 3.7-4.2 GHz band is particularly well-suited for 5G wireless services.⁶ CCA therefore supports ambitious, but prudent, action to make more mid-band spectrum in the 3.7-4.2 GHz band available for flexible use.⁷

³ Comments of Competitive Carriers Association, GN Docket No. 17-183 (filed Aug. 7, 2017) (“CCA BAC Comments”); Reply Comments of Competitive Carriers Association, GN Docket No. 17-183 (filed Nov. 15, 2017) (“CCA NOI Comments”).

⁴ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Notice of Proposed Rulemaking, Statement of FCC Commissioner Brendan Carr at 2, GN Docket No. 18-122 (rel. July 13, 2018), available at <https://docs.fcc.gov/public/attachments/FCC-18-91A4.pdf>.

⁵ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Notice of Proposed Rulemaking, Statement of FCC Commissioner Jessica Rosenworcel at 1, GN Docket No. 18-122 (rel. July 13, 2018), available at <https://docs.fcc.gov/public/attachments/FCC-18-91A5.pdf>.

⁶ See, Comments of CTIA – The Wireless Association, GN Docket No. 18-122 at 2 (filed Oct. 2, 2017); Joint Comments of Intelsat and Intel, GN Docket No. 17-183 (filed Oct. 2, 2017) at 1 (“Joint Intelsat and Intel Comments”).

⁷ As CCA has previously noted, to the extent the Commission modifies its rules for this band, it should consider carve-outs for areas in which providers are actively using the 3.7-4.2 GHz band to provide critical services to consumers and businesses. CCA NOI Comments at 5.

I. THE FCC MUST STRIKE AN APPROPRIATE BALANCE TO MAKE THE 3.7-4.2 GHZ BAND AVAILABLE TO A VARIETY OF STAKEHOLDERS

Mid-band spectrum provides a unique platform to advance next-generation technologies because it combines favorable propagation characteristics compared to high-band spectrum along with potentially large channel sizes compared to low-band spectrum. And the time is ripe for the FCC to enact smart policies to ensure all providers, especially those serving rural and remote areas, can use this particular slice to effectively deploy innovative services.⁸ CCA therefore supports exploration of new and flexible use of the 3.7 to 4.2 GHz band, while appropriately ensuring that existing users can continue to offer critical services in rural, unserved, and underserved areas. Specifically, the FCC should explore how an interference plan could reduce interference concerns while simultaneously maximizing the availability of licensed spectrum for new wireless applications throughout the band and across the country.⁹ As an initial step, the Commission should seek further information on all potential methods to reduce interference, which may include technological solutions as well as plans to relocate and/or compensate existing users of the band.

Additionally, while CCA is encouraged by varied proposals on record to reallocate the band by satellite providers and other stakeholders,¹⁰ the FCC should further examine how much spectrum could be made available for terrestrial use. Indeed, Chairman Pai has aptly stated, “[t]o help us figure out the best way forward, we [require] additional information from the band’s

⁸ See, e.g., Letter from Rebecca Murphy Thompson, EVP & GC, CCA, and Scott K. Bergmann, Senior Vice President – Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-258 (filed Apr. 20, 2018).

⁹ CCA NOI Comments at 5.

¹⁰ See, Letter from Jennifer Hindin, Counsel to C-Band Alliance, Wiley Rein, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 (filed Oct. 23, 2018).

current users. That data will help us figure out how to accommodate the needs of incumbents... [] it'll also enable us to free up more spectrum for advanced wireless services.”¹¹ To determine the optimal approach to making as much of the 3.7-4.2 GHz band available for flexible use, the Commission must have a more accurate understanding of actual use in the band. CCA therefore supports the NPRM’s proposal to clarify that protection of incumbent earth stations should include those that: 1) were operational as of April 19, 2018; 2) are licensed or registered (or had a pending application for license or registration) in the International Bureau Filing System database as of October 31, 2018; and 3) have timely certified the accuracy of information on file with the Commission to the extent required by the Order.¹² This will help to identify database errors and over-registration of licensees to further highlight solutions for allowing flexible use of the band.

CCA likewise agrees with multiple commenters, including T-Mobile, Verizon, and CTIA, that encourage the Commission to fully consider other bands or transmission options that might serve the needs of 3.7-4.2 GHz band incumbents.¹³ Accordingly, the Commission should ensure that it has a comprehensive record regarding the cost of mitigating harmful interference, and identify the most appropriate mechanisms, or combination thereof, to best accommodate incumbent users. Using this information, the FCC can adopt pro-competitive policies that accommodate necessary existing operations while fostering innovative use of this spectrum.

¹¹ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Notice of Proposed Rulemaking, Statement of FCC Chairman Ajit Pai, GN Docket No. 18-122 (rel. July 13, 2018), *available at* <https://docs.fcc.gov/public/attachments/FCC-18-91A2.pdf>.

¹² NPRM ¶ 19.

¹³ *See*, Letter from Steve B. Sharkey, Vice President, Government Affairs – Technology and Engineering Policy, T-Mobile US Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 (filed June 15, 2018) (*attaching*, Phoenix Earth Station Relocation Study – May 30, 2018). *See also*, T-Mobile Comments at 14; Verizon Comments at 13; CTIA Comments at 4-6.

II. THE FCC SHOULD ADOPT PRO-COMPETITIVE POLICIES THAT FOSTER FLEXIBLE USE OF THE 3.7-4.2 GHZ BAND

As CCA has previously explained, the Commission must maximize spectrum efficiency to expedite deployment of advanced wireless services and to promote a more competitive market.¹⁴ To that end, CCA agrees with Chairman Pai that mid-band spectrum will help to “close the mobile digital divide so that American consumers, especially in rural areas, won’t be eternally ‘stuck in the middle’” themselves.¹⁵ Accordingly, CCA agrees with a wide range of commenters that recommend that the FCC explore ways to support licensed, flexible use in the 3.7-4.2 GHz band,¹⁶ without hindering critical existing operations. As the Commission develops procedures for freeing-up available mid-band spectrum, CCA recommends that the Commission follow certain cornerstone guiding principles and adopt measures that will: 1) rationalize spectrum in these bands; 2) minimize interference; 3) ensure that there is enough spectrum available to encourage and foster competition; 4) encourage widespread participation in the auction; and 5) expeditiously deploy this valuable spectrum.¹⁷ The Commission ultimately

¹⁴ See, e.g., Comments of Competitive Carriers Association at 10–11, GN Docket No. 14-177, IB Docket No. 15-256, WT Docket No. 10-112, IB Docket No. 97-95 (filed Jan. 23, 2018).

¹⁵ *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Inquiry, Statement of Chairman Ajit Pai, GN Docket No. 17-183 (rel. Aug. 3, 2017).

¹⁶ See, Comments of T-Mobile, GN Docket No. 17-183 (filed Oct. 2, 2017) at 7-13 (“T-Mobile Comments”); Comments of Verizon, GN Docket No. 17-183 (filed Oct. 2, 2017) at 13-14 (“Verizon Comments”); Comments of CTIA, GN Docket No. 17-183 (filed Oct. 2, 2017) at 2 (“CTIA Comments”); Comments of Nokia, GN Docket No. 17-183 (filed Oct. 2, 2017), at 2 (“Nokia Comments”); Comments of Ericsson, GN Docket No. 17-183 (filed Oct. 2, 2017) at 5-6 (“Ericsson Comments”). See also, CCA BAC Comments; CCA NOI Comments.

¹⁷ See, Comments of Competitive Carriers Association, GN Docket No. 14-177 at 2-3 (filed Sept. 17, 2018).

should focus on making as much mid-band spectrum as feasible available for deployment as soon as possible.

To that end, it is imperative that the FCC identify a substantial amount of spectrum for flexible use of the band. Indeed, Commissioner O’Rielly agrees that “any reallocation must release a sufficient amount of spectrum,”¹⁸ and doing so will promote greater competition by increasing the likelihood of a number of licenses in the band. The FCC should continue to encourage satellite providers to identify the specific technologies currently in use in the band, and likewise articulate reasonable timeframes necessary to phase out, repack, and transition the band to allow for future terrestrial use

III. THE COMMISSION SHOULD BETTER UNDERSTAND HOW THE NPRM’S PROPOSED MECHANISMS COULD BE EMPLOYED

CCA supports the FCC’s proposal to explore a variety of possible mechanisms to inspire a safe, robust, and effective band transition.¹⁹ As Commissioner O’Rielly has recognized, there are numerous potential avenues for making the 3.7-4.2 GHz band available for mobile use, and the FCC should foster a thoughtful and wide-ranging discussion of how to best achieve this balance.²⁰ The FCC initially identified several approaches to meet this objective, including: facilitating alternative transmission options for 3.7-4.2 GHz incumbents; changes to the Fixed Satellite Service (“FSS”) rules that could improve the prospects of sharing in the band; physical relocation of FSS earth stations to more remote and less spectrally congested areas; structuring

¹⁸ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Notice of Proposed Rulemaking, Statement of FCC Commissioner Michael O’Rielly, GN Docket No. 18-122 (rel. July 13, 2018), *available at* <https://docs.fcc.gov/public/attachments/FCC-18-91A3.pdf>.

¹⁹ NPRM ¶ 10.

²⁰ Commissioner Michael O’Rielly, Federal Communications Commission, “A Mid-Band Spectrum Win in the Making,” (Jul. 10, 2017), *available at* <https://www.fcc.gov/news-events/blog/2017/07/10/mid-band-spectrum-win-making>.

market-based or other economic incentives for incumbent relocation (e.g., auction, and/or payment of relocations expenses); or some combination of multiple approaches). As CCA previously advocated, each of these approaches has received attention in the record and should be further explored.²¹

At the same time, the NPRM seeks comment on whether a market-based approach would most efficiently and effectively repurpose a portion or all of the band for flexible use, as compared with an auction-based approach or hybrid mechanism.²² In CCA's view, an auction mechanism could be appropriately structured to maximize mid-band spectrum and provide the most pro-competitive approach to freeing up the band.²³ Indeed, an auction could likely incentivize existing operators to reallocate spectrum resources and better maximize the band's utility by reinvigorating spectrum that has lied fallow with new and innovative use cases. The FCC also should further explore whether hybrid approaches can strike an adequate balance to amplify this slice of spectrum.²⁴

Finally, the NPRM solicits comment on whether to adopt rules for a market-based approach that would authorize current operators to voluntarily transition from all or a portion of the 3.7-4.2 GHz band.²⁵ CCA commends the FCC for exploring novel and innovative ways to further access to spectrum opportunities for a variety of stakeholders. At the same time, the market-based proposal is unprecedented; incumbent satellite providers effectively are proposing a mechanism in which they would play a central role in allocating terrestrial rights that they do

²¹ See, e.g., T-Mobile Comments at 15; Verizon Comments at 17-20; CTIA Comments at 10-13.

²² NPRM ¶ 58.

²³ *Id.* ¶ 98.

²⁴ See *supra*, note 14.

²⁵ NPRM ¶ 66.

not currently possess. While the proposal touts the benefits of speedily reallocating 3.7-4.2 GHz spectrum for terrestrial uses, it also raises significant concerns. Any process, whether public or private, must ensure fair and equitable participation from all interested parties, and while the Commission has an admirable track record on those issues based on its recent auctions, private entities do not have the same experience. Additional clarification is necessary to determine how any private market process would occur, and whether it would strike an appropriate balance to achieve the FCC's laudable goals of leveraging spectrum resources to ultimately bridge the digital divide. The Commission should carefully review all proposals on record to maximize resources for the benefit of consumers in rural and underserved communities.

IV. CONCLUSION

CCA applauds the Commission's decision to explore the wealth of innovation opportunities offered by spectrum in the 3.7-4.2 GHz band. Indeed, this slice of spectrum is particularly valuable to the next-generation of wireless services, and its use should not be hindered by outdated or spectrally inefficient practices. The FCC should adopt pro-competitive policies that maximize use of the 3.7-4.2 GHz band for a variety of stakeholders. CCA looks forward to continued work with the Commission and industry to strike an appropriate balance that maximizes spectrum efficiency while preserving critical existing operations for the benefit of consumers in urban and rural areas alike.

Respectfully submitted,

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